D H E C

PROMOTE PROTECT PROSPER

South Carolina Department of Health and Environmental Control

AIR DISPERSION MODELING QUESTIONNAIRE
Bureau of Air Quality

COMPANY NAME _____

PERMIT NUMBER _____

STACK DESIGNATION (NAME) _____

POLLUTANT/AIR TOXIC EMITTED _____

CAS NO. (FOR AIR TOXICS ONLY) _____

EMISSION RATE (lb/hr) _____

PROCESS NAME (if applicable) _____

DATE INSTALLED/MODIFIED _____

HEAT INPUT (10^6 BTU/hr) (if applicable) _____

FUEL(S) USED,INCLUDE BACKUPS (if applicable) _____

STACK HEIGHT ABOVE GROUND (ft) _____

DOES STACK HAVE A RAIN CAP OR IS DISCHARGE HORIZONTAL _____

STACK DIAMETER (i.d.) (ft) _____

UTM's OR LATITUDE/LONGITUDE OF STACK _____

STACK TEMPERATURE (deg. F) _____

STACK VELOCITY (ft/sec) _____

DISTANCE FROM STACK TO NEAREST PLANT BOUNDARY (ft) _____

BUILDING LENGTH[1] (ft) _____

BUILDING WIDTH[1] (ft) _____

BUILDING HEIGHT[1] (ft) _____

[1] If there are several buildings near the stack, include a plot plan showing stack location as well as length, width and height of nearby buildings. See back of form for additional information.

See instructions on the reverse side of this form.

INSTRUCTIONS

Purpose:

This information is needed as input data for air dispersion modeling. All sources will undergo air dispersion modeling that will be reviewed by this Bureau before construction permits are issued or operating permits renewed. Please fill out this questionnaire for each stack at your facility which has air emissions other than steam, air, nitrogen, oxygen, carbon dioxide, or any physical combination of these.

Explanation and Definition:

POLLUTANT / AIR TOXIC EMITTED is the pollutant name, i.e. TSP, PM_{10}, SO_2, NO_x, CO, Sulfuric Acid, etc.

CAS No. (Chemical Abstract No.) is required for Air Toxics only.

EMISSION RATE (lb/hr) is the permitted or actual emissions from the stack.

HEAT INPUT is only required for fuel burning processes.

FUEL(s) USED is only required for fuel burning processes.

STACK INFORMATION (ft) - The **stack height** is height above ground level, and the **diameter** is the inside diameter just before the gas stream exits the stack. Also, please indicate if the stack exhausts through a wall (horizontal discharge) or has a rain cap, elbow, or any device that prevents the gas stream discharge from being vertical. **PLEASE SEE AIR MODELING GUIDELINES SECTION 2.5 FOR FURTHER INFORMATION.**

DISTANCE FROM STACK TO NEAREST PLANT BOUNDARY (ft) - A plot plan showing the stack location and distances to plant boundaries is preferred over the closest distance. This plot plan should be drawn to scale and include building heights so the requirements under the Building Dimensions can also be met by this plot plan.

BUILDING LENGTH, WIDTH, & HEIGHT (ft) - A footnote indicates that if there are several buildings located either wholly or partly near the stack (within a circle drawn around the stack with a radius of five times the stack height), then a plot plan indicating stack locations as well as length, width and height of nearby buildings should be submitted.

ELEVATIONS - If ground elevations for the stacks and buildings vary by more than 10 feet, then write in and label as ELEVATION the elevations at each stack and building.